

Rotary Laser Receiver, SAE J1939

Rugged Detector for Rotary Laser

12 or 24 VDC

P/N: AX064000

Features

- Plexiglas lens
- 160-degree beam detection
- 190 mm (7.5 in.) beam detection height range
- Detects rotational lasers with rotation speed between 2 to 20 RPS.
- Detects rotational lasers within 630 nm to 850 nm and 1 m to 150 m
- Reports RPS of the received laser beam
- Resolution 2.3 mm
- Precision 3 mm (0.1 in.) or configurable
- 8 to 36 Vdc (12 or 24 Vdc nominal)
- SAE J1939 (CANopen® model available)
- -40 to 85°C operating temperature
- IP67
- 2 5-pin M12 connectors
- CE / UKCA marking
- Auto-baud-rate detection
- Configurable with the Axiomatic Electronic Assistant



Applications

- Off-highway equipment
- Construction
- Surveying
- Navigation on construction sites
- Aligning fences and posts
- Contour farming and drainage

Ordering Part Numbers

Rotary Laser Receiver, SAE J1939 with auto-baud-rate detection, P/N: **AX064000**

Rotary Laser Receiver, CANopen®, P/N: **AX064001**

Accessories:

Axiomatic Electronic Assistant KIT (for SAE J1939 model), P/Ns: **AX070502** or **AX070506K**

Description

The AX064000 has a laser detection diode array consisting of 40 diodes. The diode array is 190 mm in length and can be configured to detect one or two independent rotating laser beams. It has multiple configuration options to suit a variety of machine applications.

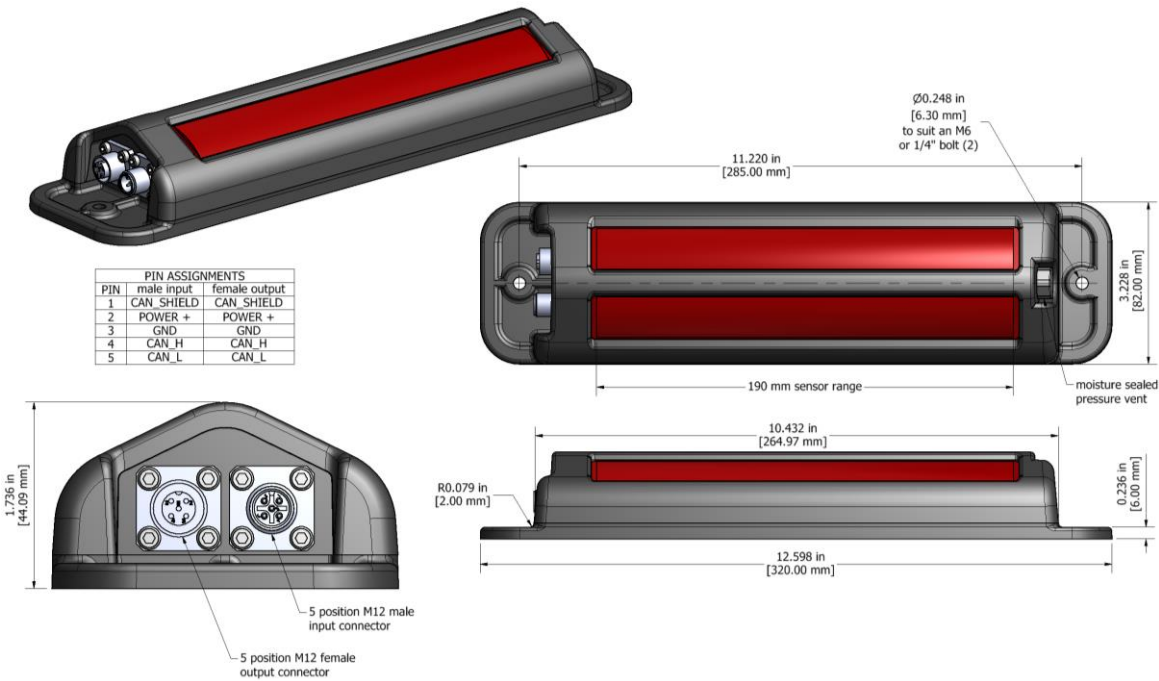
Technical Specifications

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on <https://www.axiomatic.com/service/>.

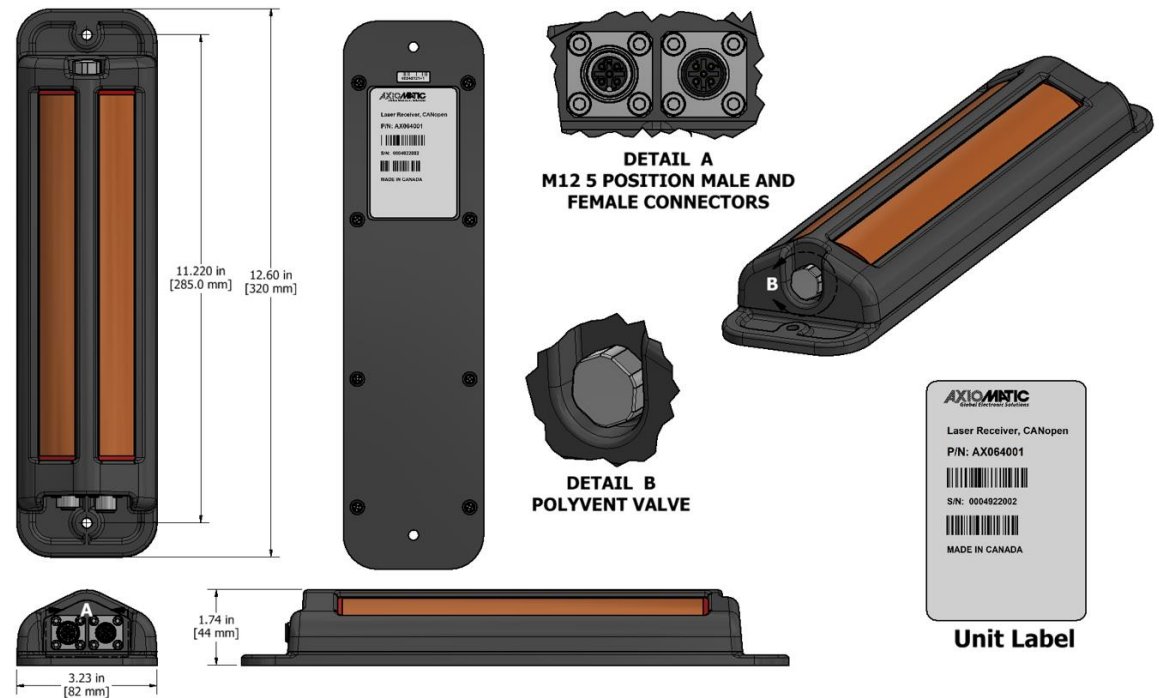
All specifications are typical at nominal input voltage and 25°C unless otherwise specified.

Power Input	8 to 36 Vdc (12 or 24 Vdc nominal)																								
CAN Port	1 SAE J1939 250 kbit/s, 500 kbit/s, 667 kbit/s, and 1 Mbit/s with auto-baud-rate detection CANopen® Model: AX064001																								
Interface with Laser Beam	160-degree beam detection 190 mm (7.5 in.) beam detection height range Detects rotational lasers with rotation speed between 2 to 20 RPS. Detects rotational lasers within 630 nm to 850 nm and 1 m to 150 m Reports RPS of the received laser beam Resolution is 2.3 mm. Precision 3 mm (0.1 in.)																								
User Interface	The Axiomatic Electronic Assistant (P/Ns AX070502 or AX070506K) is a Windows-based graphical user interface that allows interfacing with the device. It can be used to flash new firmware too.																								
EMI Compliance	CE / UKCA marking																								
Enclosure	Plexiglass Refer to the dimensional drawing.																								
Protection	IP67																								
Vibration	Contact Axiomatic																								
Shock	Contact Axiomatic																								
Weight	1.0 lb. (0.453 kg)																								
Operating Temperature	-40 to 85°C (-40 to 185°F)																								
Storage Temperature	-50 to 90°C (-58 to 194°F)																								
Electrical Pinout	<p>1 5-pin M12 female connectors (Binder P/N: 09-3458-00-05)</p> <table border="1"> <thead> <tr> <th>Pin #</th><th>Function</th></tr> </thead> <tbody> <tr> <td>1</td><td>CAN Shield</td></tr> <tr> <td>2</td><td>Power +</td></tr> <tr> <td>3</td><td>Power -</td></tr> <tr> <td>4</td><td>CAN_H</td></tr> <tr> <td>5</td><td>CAN_L</td></tr> </tbody> </table> <p>1 5-pin M12 male connectors (Binder P/N: 09-3443-00-05)</p> <table border="1"> <thead> <tr> <th>Pin #</th><th>Function</th></tr> </thead> <tbody> <tr> <td>1</td><td>CAN Shield</td></tr> <tr> <td>2</td><td>Power +</td></tr> <tr> <td>3</td><td>Power -</td></tr> <tr> <td>4</td><td>CAN_H</td></tr> <tr> <td>5</td><td>CAN_L</td></tr> </tbody> </table>	Pin #	Function	1	CAN Shield	2	Power +	3	Power -	4	CAN_H	5	CAN_L	Pin #	Function	1	CAN Shield	2	Power +	3	Power -	4	CAN_H	5	CAN_L
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Dimensional Drawing



Rev. P1



Rev. P2

CANopen® is a registered community trademark of CAN in Automation e.V.

Form: TDAX064000-03/26/2024